Claims

1. Method for restricting traffic in a packet-oriented network with a plurality of partial stretches (L), in which
- two admissibility checks are carried out for a group of data packets of a flow to be transmitted via the network,
- the first admissibility check is carried out using a limit value (Ingress(i)) for the traffic routed via the network ingress node (I) for the flow and the second using a limit value (Egress(j)) for the traffic routed via the network egress node (E) for the flow, and
- transmission of the group of data packets is not permitted, if the permitted transmission would result in traffic exceeding one of the two limit values (Ingress(i), Egress(j)).

2. Method according to Claim 1,
characterized in that limit values (Ingress(i), Egress(j)) are determined for all network ingress nodes and network egress nodes for the traffic routed via the respective nodes.

3. Method according to Claim 2,
characterized in that
- a relationship is established between the limit values (Ingress(i), Egress(j)) for the traffic routed via network ingress nodes or network egress nodes with the traffic volume (c(L)) on partial stretches (L) of the network, and
- the limit values (Ingress(i), Egress(j)) for the traffic routed via the network ingress nodes or network egress nodes are determined using values for maximum traffic volume on the partial stretches (L) of the network.

4. Method according to Claim 3,
characterized in that the
- the proportional traffic volume (aV(i,j,L)) via the individual partial stretches (L) of the network is determined for pairs ((i,j)) of network ingress nodes and network egress nodes, and
- the relationship between the limit values (Ingress(i), Egress(j))

is established for the traffic routed via the network ingress nodes or network egress nodes with the traffic volume (c(L)) on partial stretches (L) of the network using the values for proportional traffic volume (aV(i,j,L)) via the individual partial stretches (L) of the network.

5. Method according to one of the preceding Claims, characterized in that
- a relationship is established between the traffic volume (δ(i,j)) between pairs of network ingress nodes and network egress nodes and the traffic volume (c(L)) on partial stretches (L) of the network using inequations,
- an optimization method is implemented for the traffic volume (c(L)) on partial stretches (L) of the network,
-- the inequations being used as secondary conditions for optimization, and
-- the proportional traffic volume (aV(i,j,L)) via the individual partial stretches (L) of the network being used to formulate the relationship between the traffic volume (δ(i,j)) between pairs ((i,j)) of network ingress nodes and network egress nodes and the traffic volume (c(L)) on partial stretches (L) of the network.

6. Method according to one of the preceding Claims, characterized in that
- a further admissibility check is also carried out, the admissibility check being carried out using a limit value (BBB(i,j)) for the traffic volume (δ(i,j)) between the network ingress node (I) and the network egress node (E) for the flow.

7. Method according to Claim 6, characterized in that
- a relationship is established between the traffic volume (δ(i,j)) between pairs ((i,j)) of network ingress nodes and network egress nodes and the traffic volume (c(L)) on partial stretches of the network, and
- the values for maximum traffic volume on the partial stretches (L)

of the network are used to determine limits (BBB(i,j)) for the traffic volume between the pairs ((i,j)) of network ingress nodes and network egress nodes and limit values (Ingress(i), Egress(j)) for the traffic routed via the network ingress nodes and the traffic routed via the network egress nodes.

8. Method according to one of the preceding Claims, characterized in that if a partial stretch (L) fails, the limits (BBB(i,j)) or limit values (Ingress(i), Egress(j)) for the admissibility check or admissibility checks are reset with the condition that no packets are transmitted via the failed partial stretch (L).

9. Method according to one of the preceding Claims, characterized in that, for at least one admissibility check, limits (BBB(i,j)) or limit values (Ingress(i), Egress(j)) dependent on the class of service of the group of packets are used.

10. Method according to one of the preceding Claims, characterized in that
- for a majority of possible incidents limits or limit values respectively are determined, at which the traffic volume remains within a permitted frame even in the event of an incident, and
- the limits or limit values are set to the minimum of the values for the incidents under examination.

11. Method according to one of Claims 5 to 10, characterized in that
- at least one further relationship is established using an inequation, which expresses a traffic restriction on a partial stretch (L) of the network or a partial stretch (L) going away from the network, and
- the optimization method is implemented subject to this further secondary condition.